

STATE OF NEW HAMPSHIRE

INTER-DEPARTMENT COMMUNICATION

FROM: *SEL* Sarah Large
Wetlands Program Analyst

DATE: February 1, 2019
AT (OFFICE): Department of
Transportation

SUBJECT Permit Amendment Request
Northfield-Tilton, 14744A
(DES#2016-01552)

Bureau of
Environment

TO Gino Infascelli, Public Works Permitting Officer
New Hampshire Wetlands Bureau
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Forwarded herewith is a permit amendment request prepared by NH DOT for Northfield-Tilton 14744A, (DES #2016-01552), project.

The Department has been informed by the contractor, [Beck & Bellucci], that the impact footprint to build the temporary causeway within the Winnepesaukee River to facilitate the construction of the scour protection work at each of the piers has changed from what was permitted. The updated impact footprint can be seen on the attached amended plan. The temporary impacts labeled 2A and 3A will be phased with the removal of the causeway to ensure the watercourse remains connected and open. See the attached document outlining the removal of the causeway. The total temporary impacts to the channel (impact area F) and temporary impacts to the banks (impact area H) have decreased from what was permitted. Therefore, the overall square feet of impacts for the project have decreased. The updated amended impact footprint can be seen on the attached amended plan.

The proposed amendment results in the following decreases:

- Sq. Ft. of Temporary Impact
 - o Original Impact F (14,062) minus Amended Impact F (12,487) = A reduction of 1,575 sq. ft.
 - o Original impact H (1,466) minus Amended Impact H (449) = A reduction of 1,017 sq. ft.

The original total impacts were 46,910 sq. ft.
The amended total impacts are 44,318 sq. ft.

Total decrease in impacts = 2,592 sq. ft.

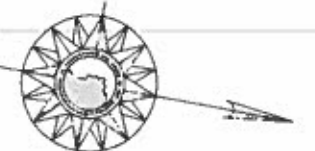
A payment voucher had originally been processed for this application (Voucher #443642) in the amount of \$9,382. Since the project has decreased it's footprint an additional payment for impacts is not included.

There was no change in permanent impacts therefore additional mitigation is not needed or required.

If and when this amendment request meets with the approval of the Bureau, please send the permit directly to Sarah Large, Wetlands Program Analyst, Bureau of Environment.

SEL:scl
Enclosures
cc:
BOE Original
Town of Northfield
Town of Tilton
Michael Hicks, US Army Corp of Engineers

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DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE
INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL
OTHER DETAILS, FOR WHICH NO SCALE IS SHOWN, ARE DRAWN
PROPORTIONAL AND ARE FULLY DIMENSIONED.




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STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION • BUREAU OF ENVIRONMENT

WETLAND IMPACT PLANS
I-93 OVER WINNIPESAUKEE RIVER
NORTHFIELD & TILTON N.H.

| DCN | FEDERAL PROJECT NO. | SHEET NO. | TOTAL SHEETS |
|------------------|---------------------|-----------|--------------|
| 30464_GENPLN.dgn | A0011042) | 8 | 15 |

| TYPE OF WETLAND IMPACT | SHADING/ HATCHING |
|--|---|
| NEW HAMPSHIRE WETLANDS BUREAU (PERMANENT NON-WETLAND) |  |
| NEW HAMPSHIRE WETLANDS BUREAU & ARMY CORP OF ENGINEERS (PERMANENT WETLAND) |  |
| TEMPORARY IMPACTS |  |

WETLAND DESIGNATION NUMBER

| # | WETLAND IMPACT LOCATION |
|---|-------------------------|
| 1 | WETLAND IMPACT LOCATION |


As-Built Temporary Impacts (2017 & 2018)

As-Built Temporary Bank Impacts (2017 & 2018)

Proposed Temporary Impacts

LEGEND:

CONCRETE ARMOR MATRIX COMPONENTS (CAMC)



- RIPRAP, CLASS V (NEW CLASSIFICATION, SIMILAR TO PREVIOUS RIPRAP, CLASS C GRADATION) - ITEM 583.5

1. EXISTING DETAIL SHOWN IN ELEVATION WAS TAKEN FROM BRIDGE SHEET NO. 2 OF 27, 1978 PLANS. THIS PLAN DEPICTS PROPOSED CHANNEL WORK ONLY AND ANY OTHER REFERENCE TO PROPOSED WORK IS BASED ON 1978 PLANS. EXISTING DETAIL IN PLAN VIEW IS BASED ON TOPOGRAPHIC SURVEY PERFORMED BY NHDOT APRIL, 2012.
2. FOR 1-93 NORTHBOUND AND SOUTHBOUND, PIER 1 & 2 DETAILS, SEE SHEET 2.
3. 100-YEAR FLOODPLAIN LIMIT AS DEPICTED IS INTERPOLATED FROM BASE FLOOD ELEVATIONS PROVIDED IN FEMA FLOOD INSURANCE STUDY NUMBER 33013CV001A, FEDERAL EMERGENCY MANAGEMENT AGENCY, EFFECTIVE APRIL 10, 2010.
4. MAINTAIN A CLEAR AND UNOBSTRUCTED NAVIGATION CHANNEL BETWEEN PIERS 1 AND 2.

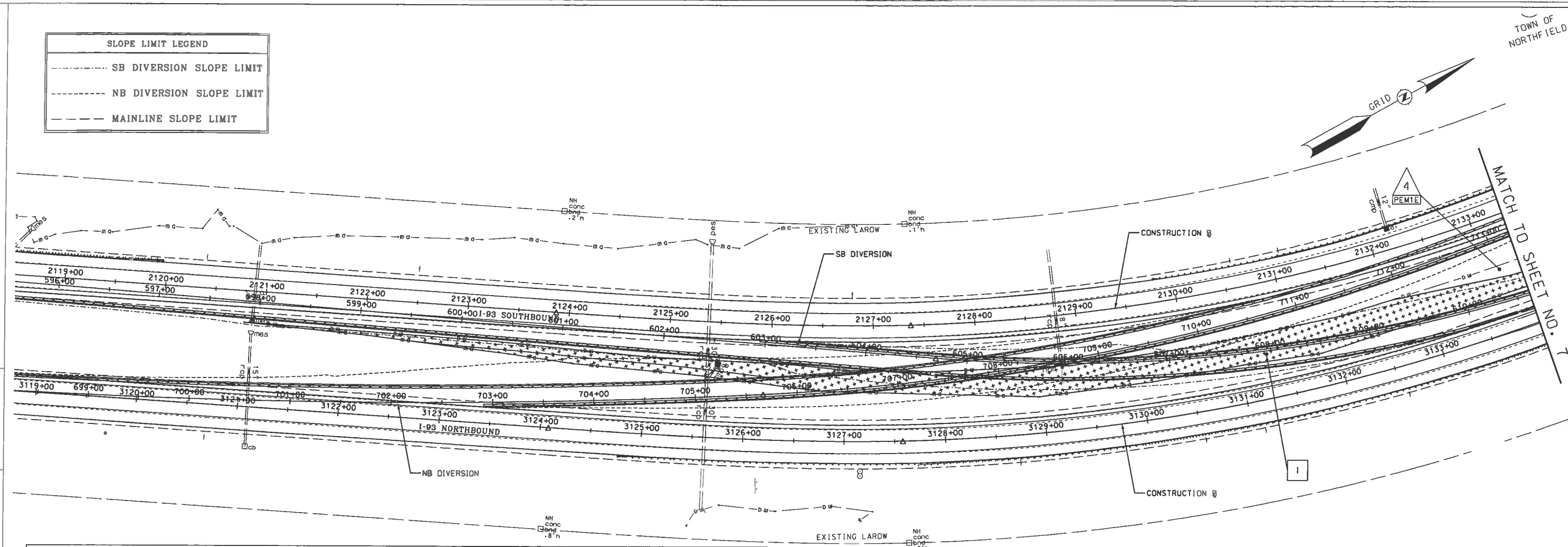
ELEVATION
NOT TO SCALE

Drawing Copyright © 2014

CHA

11 King Court
Keene, NH 03431-4648
603.357.2445 • www.chacompanies.com

| S/D PROCESSED | | NHDT | DATE | REVISIONS AFTER PROPOSAL | | | |
|------------------|--|------|------|--------------------------|------|---------|-------------|
| NEW DESIGN | | TPL | DATE | NUMBER | DATE | STATION | DESCRIPTION |
| SHEET CHECKED | | DEM | DATE | | | | |
| AS BUILT DETAILS | | | DATE | | | | |










| WETLAND IMPACT SUMMARY | | | | | | | | |
|------------------------|---------------------------|----------|---------------------------|-------------------------------------|------|---------|----------------------|--------------------------------|
| WETLAND NUMBER | WETLAND CLASSIFICATION | LOCATION | AREA | | | | | COMMENTS |
| | | | PERMANENT IMPACTS | | | | TEMPORARY IMPACTS | |
| | | | N.H.W.B. (NON-WETLAND) | N.H.W.B. & A.C.O.E. (WETLAND) | BANK | CHANNEL | | |
| | | | SF | SF | LF | LF | SF | |
| 1 | R2UBH | A | | 376 | | 61 | | SB PIER 1 |
| 1 | R2UBH | B | | | | | 454 | SB PIER 1 |
| 1 | R2UBH | C | | 406 | | 50 | | NB PIER 1 |
| 1 | R2UBH | D | | | | | 551 | NB PIER 1 |
| 1 | R2UBH | E | | 1,642 | | 62 | | SB PIER 2 |
| 1 | R2UBH | F | | | | | -14,062 | 10,947 + 519 (2A) + 1,021 (3A) |
| 1 | R2UBH | G | | 1,268 | | 52 | | NB PIER 2 |
| 3 | BANK | H | | | | | -1,466 | 449 |
| 4 | PEM1E | I | | | | | 26,537 | |
| 5 | PEM1Ed | J | | | | | 128 | |
| 6 | PEM1Ed | K | | | | | 20 | |
| TOTALS | | | 0 | 3,692 | 0 | 225 | 43,218 | 40,626 |

| TOTAL IMPACTS FOR WETLANDS AND SHORELAND PERMITS | | | |
|--|--|---------|--------------|
| WETLAND IMPACTS | | | |
| PERMANENT IMPACTS (WETLAND) | | 3,692 | SF |
| PERMANENT IMPACTS (NON-WETLAND) | | 0 | SF |
| TEMPORARY IMPACTS: | | -43,218 | SF 40,626 SF |
| TOTAL IMPACTS: | | -46,910 | SF 44,318 SF |
| STREAM IMPACTS | | | |
| PERMANENT IMPACTS TO BANKS | | 0 | LF |
| PERMANENT IMPACTS TO CHANNEL | | 225 | LF |
| TOTAL STREAM IMPACTS: | | 225 | LF |

| WETLAND CLASSIFICATION CODES | |
|------------------------------|---|
| R2UBH | RIVERINE, LOWER PERENNIAL, UNCONSOLIDATED BOTTOM, PERMANENTLY FLOODED |
| PEM1E | PALUSTRINE, PERSISTENT EMERGENT VEGETATION, SEASONALLY FLOODED / SATURATED |
| BANK | NH JURISDICTIONAL RIVERBANK |
| PEM1d | PALUSTRINE, PERSISTENT EMERGENT VEGETATION, SEASONALLY FLOODED / SATURATED, DITCHED |

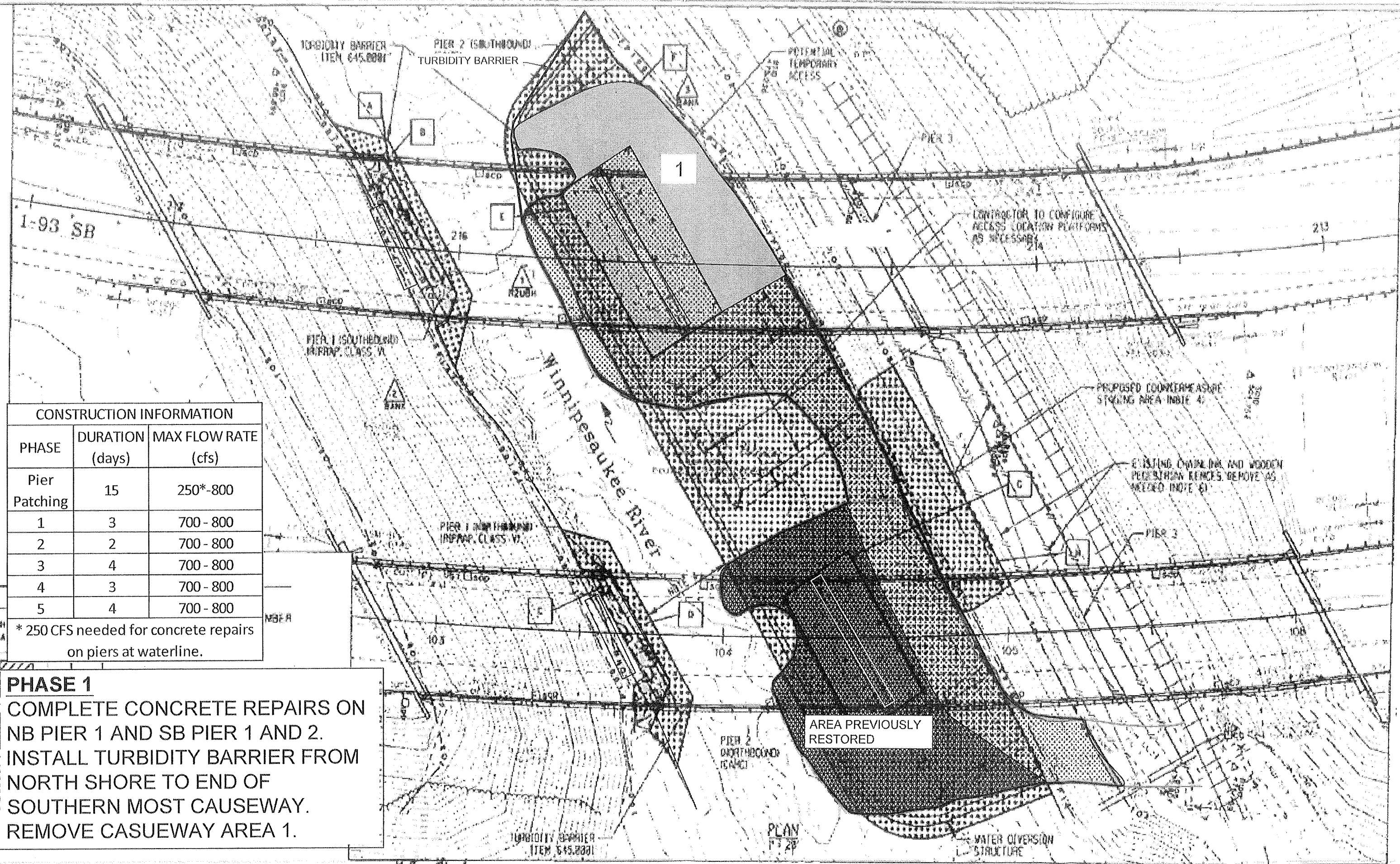
LEGEND

| | | | |
|--|---|---|----------------------------|
| TYPE OF WETLAND IMPACT | SHADING/ HATCHING |  | WETLAND DESIGNATION NUMBER |
| NEW HAMPSHIRE WETLANDS BUREAU (PERMANENT NON-WETLAND) |  |  | WETLAND IMPACT LOCATION |
| NEW HAMPSHIRE WETLANDS BUREAU & ARMY CORP OF ENGINEERS (PERMANENT WETLAND) |  |  | WETLAND MITIGATION AREA |
| TEMPORARY IMPACTS |  |  | MITIGATION |



| | | | |
|---|-------------------|-----------|--------------|
| STATE OF NEW HAMPSHIRE | | | |
| DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN | | | |
| <i>WETLAND IMPACT PLANS</i> | | | |
| DGN | STATE PROJECT NO. | SHEET NO. | TOTAL SHEETS |
| Impact Plan 1 | 16147 | 6 | 15 |

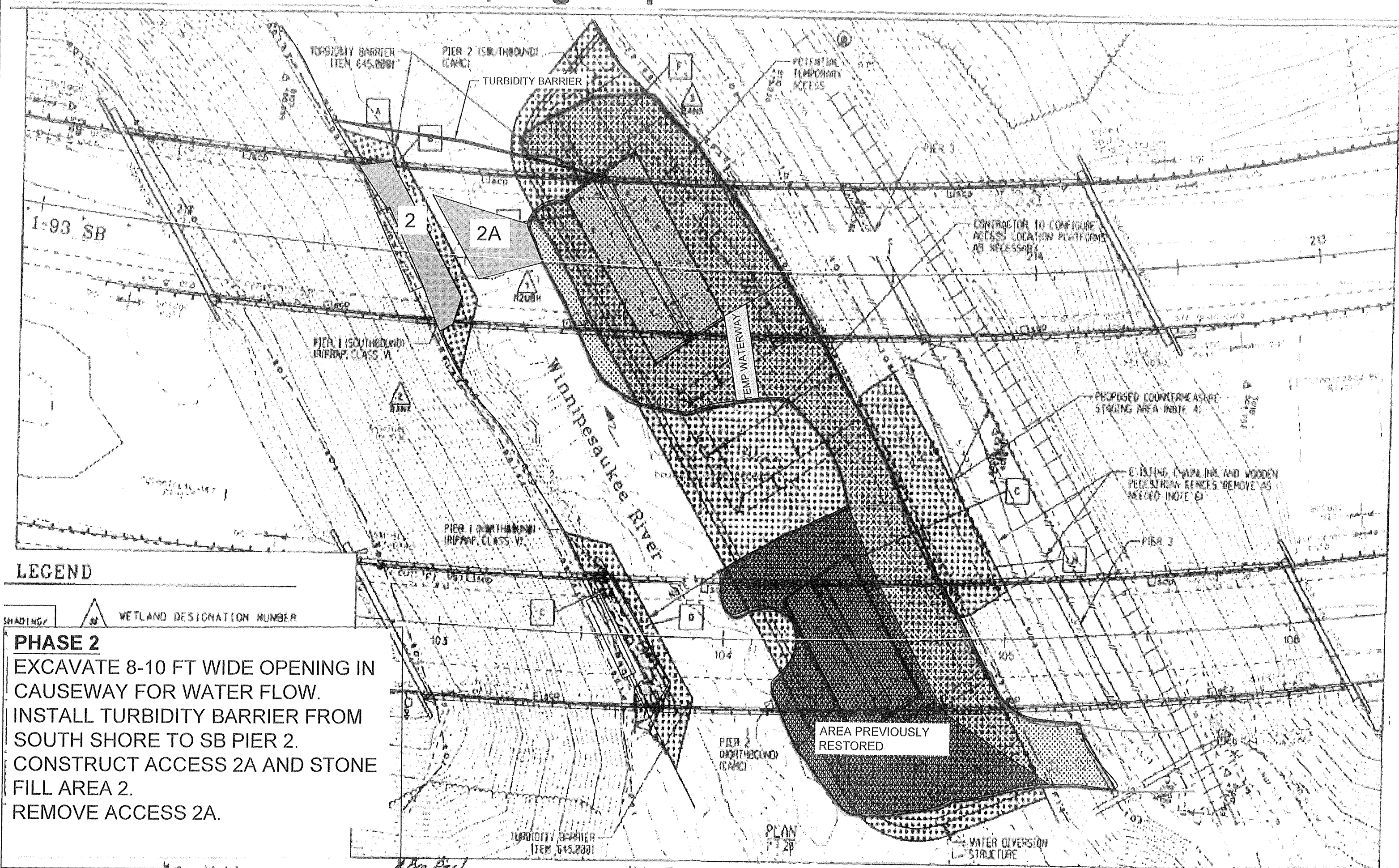


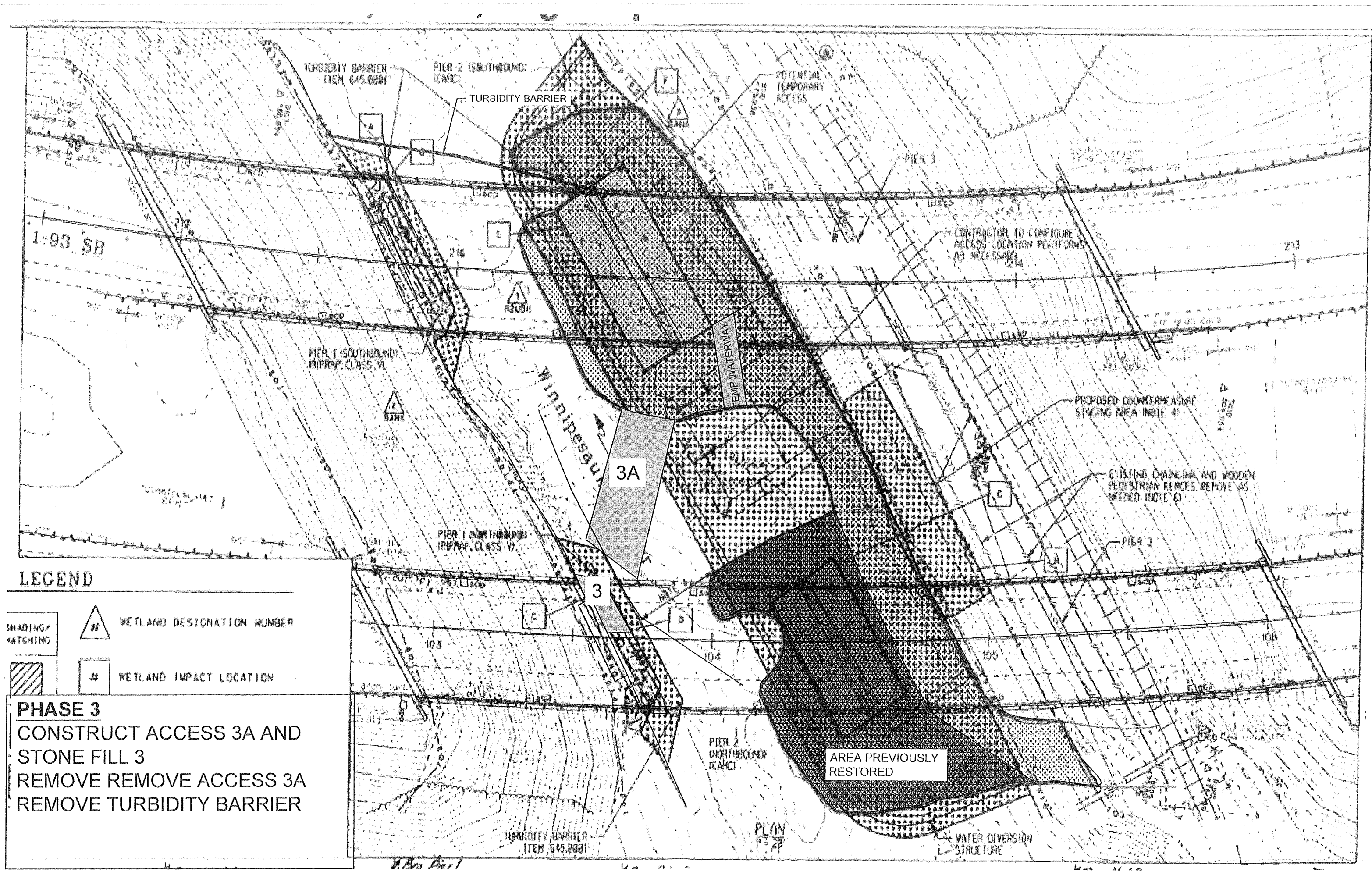


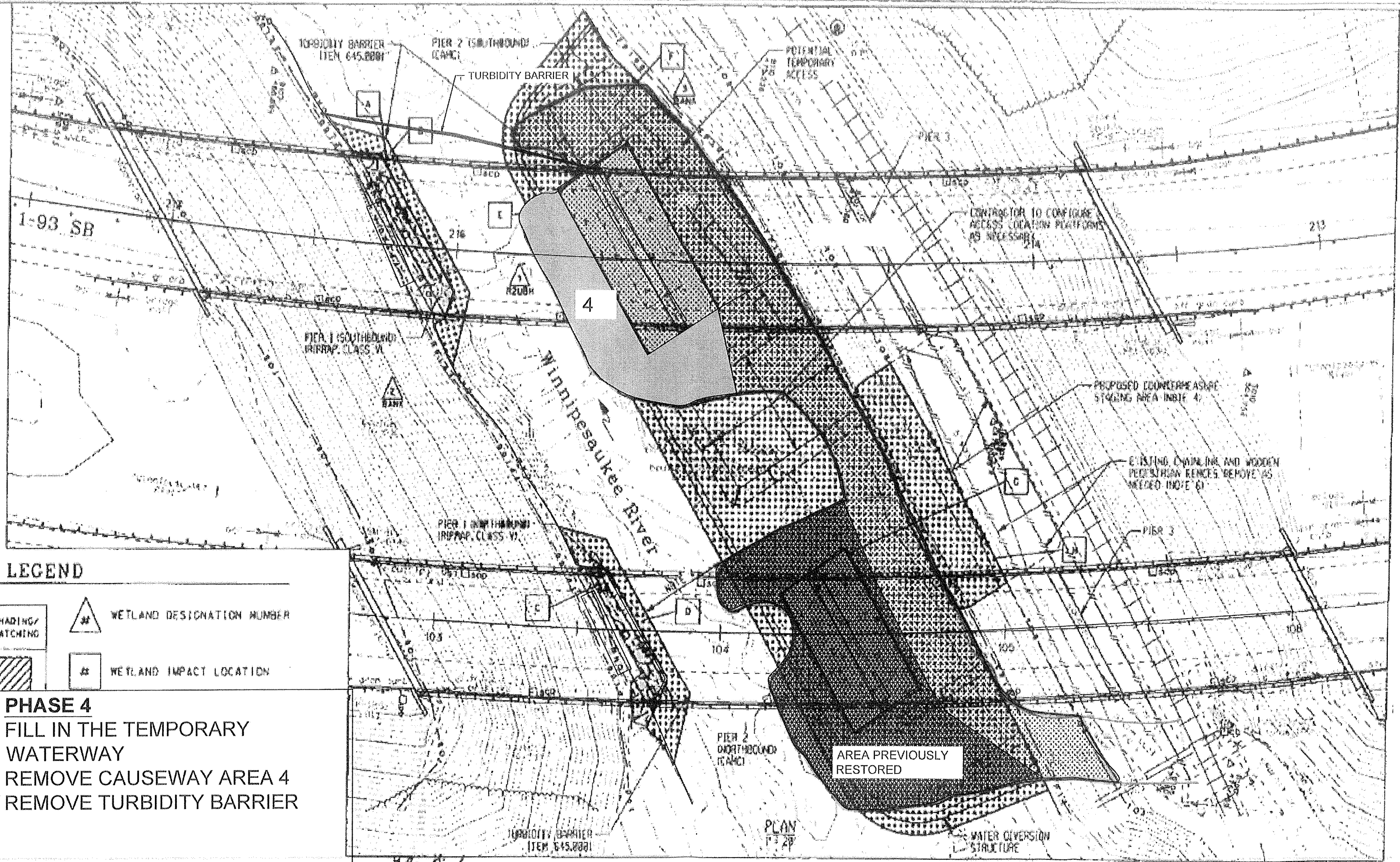
| CONSTRUCTION INFORMATION | | |
|--------------------------|--------------------|------------------------|
| PHASE | DURATION (days) | MAX FLOW RATE (cfs) |
| Pier Patching | 15 | 250*-800 |
| 1 | 3 | 700 - 800 |
| 2 | 2 | 700 - 800 |
| 3 | 4 | 700 - 800 |
| 4 | 3 | 700 - 800 |
| 5 | 4 | 700 - 800 |

* 250 CFS needed for concrete repairs on piers at waterline.

PHASE 1
COMPLETE CONCRETE REPAIRS ON NB PIER 1 AND SB PIER 1 AND 2. INSTALL TURBIDITY BARRIER FROM NORTH SHORE TO END OF SOUTHERN MOST CAUSEWAY. REMOVE CASUEWAY AREA 1.







LEGEND

| | | |
|---|---|----------------------------|
| SHADING/ WATCHING |  | WETLAND DESIGNATION NUMBER |
|  | | WETLAND IMPACT LOCATION |

PHASE 4

- FILL IN THE TEMPORARY WATERWAY
- REMOVE CAUSEWAY AREA 4
- REMOVE TURBIDITY BARRIER

